



Patent  
Attorney's Docket No. 028723-384

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Joe W. GRAY

Application No.: 10/608,092

Filed: June 30, 2003

For: CHROMOSOME-SPECIFIC STAINING  
TO DETECT GENETIC  
REARRANGEMENTS

**Group Art Unit:**

**Examiner:**

Confirmation No.:

## INFORMATION DISCLOSURE STATEMENT TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed is an Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

- ☒ No additional fee for submission of an IDS is required.
- ☐ The fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e), and the fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) are also enclosed.
- ☐ Charge \$\_\_\_\_\_ to Deposit Account No. 02-4800 for the fee due.
- ☐ A check in the amount of \$\_\_\_\_\_ is enclosed for the fee due.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

**BURNS, DOANE, SWECKER & MATHIS, L.L.P.**

Date: 26 August 2003

By: Malcolm K. McGowan  
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Inventor Patent Application of )  
Joe W. GRAY ) Group Art Unit:  
Application No.: 10/608,092 ) Examiner:  
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**FIRST**  
**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98.

Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed.

The documents are being submitted within three (3) months of the filing or entry of the national stage of this application or before the first Office Action on the merits, whichever is later. Since the documents are being filed within the time period set forth in 37 C.F.R. § 1.97(b) no fee or statement is required.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner-initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: 26 August 2003

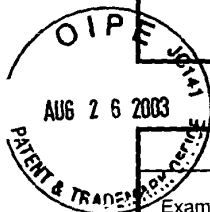
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Substitute for forms 1449A/PTO &amp; 1449B/PTO

ATTORNEY'S DKT NO.  
028723-384APPLICATION NO.  
10/608,092FIRST INFORMATION DISCLOSURE  
STATEMENT BY APPLICANTAPPLICANT  
Joe W. GRAYFILING DATE  
June 30, 2003

GROUP



## U.S. PATENT DOCUMENTS

Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)
	5,447,841		Gray et al.	09/05/1995
	6,414,133 B1		Dietz-Band et al.	07/02/2002
	6,025,126		Gray	02/15/2000

## FOREIGN PATENT DOCUMENTS

Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	Translation Yes	No
	WO 94/09022		PCT	04/28/1994		
	1,301,605		Canada	05/26/1992		

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	Arnoidus et al., "Detection of the Philadelphia Chromosome in Interphase Nuclei", <i>Cytogenet Cell Genet</i> 54:108-111 (1990), Karger, Basel, Switzerland
	Bartram et al., "Translocation of <i>c-abl</i> Oncogene Correlates with the Presence of a Philadelphia Chromosome in chronic Myelocytic Leukaemia", <i>Nature</i> , Vol. 306, 277-280 (Nov 1983), Nature Publishing Group, London, England
	Chan et al, "A Novel <i>abl</i> Protein Expressed in Philadelphia Chromosome Positive Acute Lymphoblastic Leukaemia", <i>Nature</i> , Vol. 325, (Feb. 1987), 635-637, Nature Publishing Group, London, England
	Clark et al., "Expression of a Distinctive <i>BCR-ABL</i> Oncogene in Ph-Positive Acute Lymphocytic Leukemia (ALL)", <i>Science</i> , Vol. 239 (Feb. 1988), 775-777, American Assoc. for the Advancement of Science, Washington, D.C. USA
	Fainstein et al., "A New Fused Transcript in Philadelphia Chromosome Positive Acute Lymphocytic Leukaemia", <i>Nature</i> , Vol. 330 (Nov. 1987) 386-388, Nature Publishing Group, London, England
	Groffen et al, "Philadelphia Chromosomal Breakpoints are Clustered Within a Limited Region, <i>bcr</i> , on Chromosome 22", <i>Cell</i> , Vol. 36, (Jan. 1984), 93-99, Cell Press, Cambridge, MA, USA
	Grosveld et al., "The Chronic Myelocytic Cell Line K562 Contains a Breakpoint in <i>bcr</i> and Produces a chimeric <i>bcr/c-abl</i> Transcript", <i>Molecular and Cellular Biology</i> , Vol. 6, No. 2 (Feb 1986) 607-616, American Society for Microbiology, Washington, D.C. USA
	Heisterkamp et al., "The Human <i>v-abl</i> Cellular Homologue", <i>Journal of Molecular and Applied Genetics</i> , Vol. 2, No. 1 (1983) 57-68, Raven Press, New York

Substitute for forms 1449A/PTO &amp; 1449B/PTO

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APPLICATION NO.

10/608,092

**FIRST INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

APPLICANT

Joe W. GRAY

FILING DATE

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AUG 26 2003

**NON PATENT LITERATURE DOCUMENTS**

 Examiner  
Initials

Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.

 Heisterkamp et al., "Localization of the *c-abl* Oncogene Adjacent to a Translocation Break Point in Chronic Myelocytic Leukaemia", *Nature*, Vol. 306 (Nov. 1983) 239-242, Nature Publishing Group, London, England

 Heisterkamp et al., "Structural Organization of the *bcr* Gene and its Role in the Ph' Translocation", *Nature* (June 1985) Vol. 315, 758 -761, Nature Publishing Group, London, England

 Heisterkamp et al., The First BCR Gene Intron Contains Breakpoints in Philadelphia Chromosome Positive Leukemia", *Nucleic Acids Research*, Vol. 16, No. 21 (1988) 10070-10081, IRL Press Limited, Oxford, England

 Hermans et al, "Unique Fusion of *bcr* and *c-abl* Genes in Philadelphia Chromosome Positive Acute Lymphoblastic Leukemia", *Cell*, vol. 51 (Oct. 1987), 33-40 Cell Press, Cambridge, MA, USA

 Kawasaki et al., "Diagnosis of Chronic Myeloid and Acute Lymphocytic Leukemias by Detection of Leukemia-Specific mRNA Sequences Amplified *in vitro*", *Proc. Natl. Acad. Sci., USA*, Vol. 85 (Aug. 1988) 5698-5702, National Academy of Sciences, Washington, D.C., USA

 de Klein et al., "A Cellular Oncogene is Translocated to the Philadelphia chromosome in Chronic Myelocytic Leukaemia", *Nature*, Vol. 300 (Dec. 1982) 765-767, Nature Publishing Group, London, England

 Pinkel et al., "Fluorescence *in situ* Hybridization with Human Chromosome-Specific Libraries: Detection of Trisomy 21 and Translocations of Chromosome 4", *Proc. Natl. Acad. Sci., USA* Vol. 85 (Dec. 1988), 9138-9142, National Academy of Sciences, Washington, D.C., USA

 Shtairid et al., "Analysis of Breakpoints Within the *bcr* Gene and Their Correlation with the Clinical Course of Philadelphia-Positive chronic Myelogenous Leukemia", *Blood*, Vol. 72, No. 2 (Aug. 1988), 485-490, Grune & Stratton, Washington, D.C., USA

 Shtivelman et al., "Alternative Splicing of RNAs Transcribed from the Human *abl* Gene and from the *bcr-abl* Fused Gene", *Cell*, Vol. 47 (Oct. 1986) 277-284, Cell Press, Cambridge, MA, USA

 Westbrook et al., "Long-Range Mapping of the Philadelphia Chromosome by Pulsed-field Gel Electrophoresis", *Blood*, Vol. 71, No. 3 (March 1988) 697-702, Grune & Stratton, Washington, D.C., USA

 Examiner  
Signature

Date

Considered

 EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. **SEND TO:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.